

CLAIMS

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is as follows:

- 1 1. A method of operating a motion video decoder
2 for decoding compressed image data, said method
3 including steps of
4 determining a frame switch point in accordance
5 with a signal corresponding to completion of
6 decoding of a previous frame, and
7 synchronizing said motion video decoder with a
8 bottom border of a scaled image.

- 1 2. A method as recited in claim 1, comprising
2 further steps of
3 testing spill buffer capacity responsive to
4 said signal to produce a test result, and
5 controlling scaling in a decoding path of said
6 decoder and altering decoder latency in response to
7 said test result.

1 3. A method as recited in claim 2, including the
2 further step of
3 reconfiguring a frame buffer to accommodate a
4 increased latency of motion video data scaled in
5 said decoding path.

1 4. A method as recited in claim 3, including the
2 further step of
3 continuously scaling a motion video image from
4 said motion video data scaled in said decoding
5 path.

1 5. A method as recited in claim 4, wherein said
2 continuously scaling step is performed by
3 interpolation.

1 6. A method as recited in claim 1, wherein decoder
2 to display latency of reference motion video images
3 is 1.5 frames and latency of interpolated motion
4 video images is 0.5 frames.

1 7. A method as recited in claim 2, wherein said
2 spill buffer has a capacity equal to or less than
3 0.5 fields.

1 8. A method as recited in claim 2, wherein said
2 spill buffer has a capacity equal to or less than
3 one field.

1 9. A method of operating a motion video decoder
2 comprising steps of
3 testing spill buffer capacity responsive to a
4 signal to produce a test result, and
5 controlling scaling in a decoding path of a
6 decoder and altering decoder latency in response to
7 said test result.

1 10. A method as recited in claim 9, including the
2 further step of
3 reconfiguring a frame buffer to accommodate a
4 increased latency of motion video data scaled in
5 said decoding path.

1 11. A method as recited in claim 10, including the
2 further step of
3 continuously scaling a motion video image from
4 said motion video data scaled in said decoding
5 path.

1 12. A method as recited in claim 11, wherein said
2 continuously scaling step is performed by
3 interpolation.

1 13. A method as recited in claim 9, wherein decoder
2 to display latency of reference motion video images
3 is 1.5 frames and latency of interpolated motion
4 video images is 0.5 frames when said testing step
5 indicates spill buffer capacity is sufficient for
6 selected scaling of said motion video.

1 14. A method as recited in claim 9, wherein said
2 spill buffer has a capacity equal to or less than
3 0.5 fields.

1 15. A method as recited in claim 10, wherein said
2 spill buffer has a capacity equal to or less than
3 one field.